

WHAT IS CLAIMED IS:

1. A moisture-curable, alkoxy silane-functional polyether urethane comprising

5 a) 20 to 90% by weight, based on the weight of a) and b), of a polyether urethane containing two or more reactive silane groups and one or more polyether segments, wherein the polyether segments have a number average molecular weight of at least 3000 and a degree of unsaturation of less than 0.04 milliequivalents/g, provided that the sum of the number average molecular weights of

10 all of the polyether segments per molecule averages 6000 to 20,000, and wherein the reactive silane groups are incorporated as the reaction product of an isocyanate group with a compound corresponding to the formula

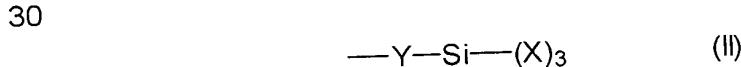


20 wherein

X represents identical or different organic groups which are inert to isocyanate groups below 100°C, provided that at least two of these groups are alkoxy or acyloxy groups,

Y represents a linear or branched alkylene group containing 1 to 8 carbon atoms and

25 R₁ represents an organic group which is inert to isocyanate groups at a temperature of 100°C or less, provided that R₁ is not a succinate group, or R₁ represents a group corresponding to formula II

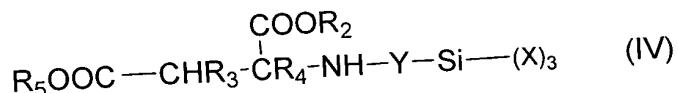


and

5 b) 10 to 80% by weight, based on the weight of a) and b), of a polyether urethane containing one reactive silane group and one or more polyether segments having a number average molecular weight of 1000 to 15,000.

10 2. The polyether urethane of Claim 1 wherein
 X represents identical or different alkoxy groups having 1 to 4 carbon atoms and
 Y represents a linear radical containing 2 to 4 carbon atoms or a branched radical containing 5 to 6 carbon atoms and
 R₁ represents an alkyl, cycloalkyl or aromatic group having 1 to 12 carbon atoms.

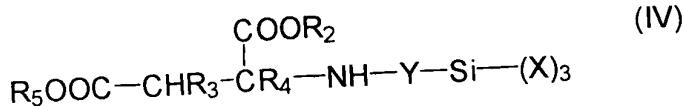
15 3. The polyether urethane of Claim 1 wherein the reactive silane groups of component b) are incorporated as the reaction product of an isocyanate group and a compound corresponding to the formula



20 wherein
 R₂ and R₅ are identical or different and represent organic groups which are inert to isocyanate groups at a temperature of 100°C or less and
 R₃ and R₄ are identical or different and represent hydrogen or organic groups which are inert towards isocyanate groups at a temperature of 100°C or less.

25 4. The polyether urethane of Claim 2 wherein the reactive silane groups of component b) are incorporated as the reaction product of an isocyanate group and a compound corresponding to the formula

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wherein

R_2 and R_5 are identical or different and represent alkyl groups having 1 to 4 carbon atoms and

10 R_3 and R_4 represent hydrogen.

5. The polyether urethane of Claim 1 wherein the reactive

silane groups of component b) are incorporated as the reaction product of an isocyanate group and a compound corresponding to formula I.

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6. The polyether urethane of Claim 2 wherein the reactive

silane groups of component b) are incorporated as the reaction product of an isocyanate group and a compound corresponding to formula I.

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7. The polyether urethane of Claim 1 wherein polyether

urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

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8. The polyether urethane of Claim 2 wherein polyether

urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

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9. The polyether urethane of Claim 3 wherein polyether

urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

10. The polyether urethane of Claim 4 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

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11. The polyether urethane of Claim 5 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

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12. The polyether urethane of Claim 6 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

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13. The polyether urethane of Claim 1 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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14. The polyether urethane of Claim 2 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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15. The polyether urethane of Claim 3 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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16. The polyether urethane of Claim 4 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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17. The polyether urethane of Claim 5 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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18. The polyether urethane of Claim 6 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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19. The polyether urethane of Claim 7 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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20. The polyether urethane of Claim 8 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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21. The polyether urethane of Claim 9 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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22. The polyether urethane of Claim 10 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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23. The polyether urethane of Claim 11 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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24. The polyether urethane of Claim 12 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

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25. A sealant, adhesive or coating composition containing the moisture-curable, alkoxy silane-functional polyether urethane of Claim 1.